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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,370	12/15/2000	Kevin C. Davis	554-258 (Davis 1)	2410

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EXAMINER

CHANG, EDITH M

ART UNIT	PAPER NUMBER
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2634

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DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/737,370	DAVIS, KEVIN C.	
	Examiner	Art Unit	
	Edith M Chang	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The “two capacitors in parallel to a respective one of the feedback resistors” is not taught in the drawing of the specification.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 11-14, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by McGinn (US 5333192).

Regarding **claims 1, 18 & 20**, McGinn discloses a transmission line tap circuit and its methods comprising (Fig.2): at least two input terminals (2 & 3 Fig.2 are two input terminals)

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configured for coupling to a transmission line (TIP and RING Fig. 1/2 is the transmission line, column 2 lines 46-50); circuitry/means configured to provide an impedance load to the transmission line for tapping the transmission line (Abstract, 23 & 27 Fig. 2) and receiving a transmission propagating there through; circuitry configured to amplify the received transmission signal (20 Fig. 1/21 & 25 Fig. 2 is the circuitry configured to amplify the received transmission signal); circuitry/means configured to provide an impedance match to an impedance load at least one line interface unit (LIU) (61/64 Fig. 1/2 the hybrid circuit is the LIU, column 3 lines 12-21 & column 4 lines 4-17, lines 39-48, Fig. 2 is the circuitry configured to provide an impedance match to an impedance load at least one LIU) ; and at least two output terminals configured for coupling to the at least one LIU (61 & 64 Fig. 2 are the two output terminals).

Regarding **claim 2**, McGinn discloses the circuitry configured to provide the impedance load to the transmission line, the circuitry configured to amplify the received transmission signal, and the circuitry configured to provide the impedance match to the LIU are provided within a single stage (Fig. 2, they are provided with in a single stage).

Regarding **claim 3**, McGinn discloses the circuitry configured to provide the impedance load to the transmission line includes at least two resistors where a first of the at least two resistor is connected to a first of the at least two input terminals (23 connected to the terminal 2 Fig. 2) and a second of the at least two resistors is connected to a second of the least two input terminals (27 connected to the terminal 3 Fig. 2).

Regarding **claim 4**, McGinn discloses a circuitry configured to block direct current present in the received transmission signal (24 & 28 Fig. 2).

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Regarding **claim 5**, McGinn discloses the circuitry configured to block direct current including at least a first capacitor connected to a first of the at least two input terminals (24 connected to terminal 2 Fig.2) and a second capacitor connected to a second of the at least two input terminals (28 connected to terminal 3 Fig.2).

Regarding **claim 6**, McGinn discloses a dissipation load for the received transmission signal (12-14a-14b/15a-15b-13 Fig.2, column 5 lines 17-24).

Regarding **claim 7**, McGinn discloses the circuitry configured to provide a dissipation load for the received transmission signal including at least two resistors connected in series and coupled to the at least two input terminals (12-14a-14b connected to the two input terminals 2&3 Fig.2).

Regarding **claim 8**, McGinn discloses the circuitry configured to suppress noise in the received transmission signal and to shape the received transmission signal (7 Fig.2).

Regarding **claim 9**, McGinn discloses the circuitry configured to suppress noise providing a capacitor value which can be supplied with two capacitors in series and coupled to the two input terminals and the other end of the capacitors connected together to the ground as the electrical characteristic of the capacitor ( $C = \text{current/voltage}$ ).

Regarding **claim 11**, McGinn discloses a dissipation load to the circuitry configured to amplify the received transmission signal (40 Fig.2).

Regarding **claim 12**, McGinn discloses the dissipation load is in parallel to the circuitry configured to amplify the received transmission signal and includes at least two resistors connected in series (41&43 Fig.2 are two resistors, 40 Fig.2 is in parallel to the 21 & 25 Fig.2).

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Regarding **claim 13**, McGinn discloses a circuitry configured to block direct current from the circuitry configured to amplify the received transmission signal (34&44 Fig.2).

Regarding **claim 14**, McGinn discloses the circuitry configured to block direct current including at least two capacitors connected in series and coupled to the two output terminals (Fig.2 34&44 are two capacitors connected in series, 34 coupled to TIP/2 terminal and 44 coupled to RING/3 terminal).

Regarding **claim 17**, McGinn discloses gain adjustment circuitry configured to adjust the gain of the circuit (21/25 Fig.2, column 4 lines 59-65, the circuitry 21-22-29-25-26 is the gain adjustment circuitry).

Regarding **claim 19**, McGinn discloses the steps of blocking direct current present in the received transmission signal (24&28 Fig.2); providing a dissipation load for the received transmission signal (12/13 Fig.2, column 5 lines 17-24); and suppressing noise in the received transmission signal (7 Fig.2 suppresses the noise).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGinn (US 5333192) in view of Fischer et al. (US 6205218 B1).

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Regarding **claim 10**, McGinn discloses two amplifiers each having respective feedback resistor, however does not specify the capacitors. Fischer et al. teaches the amplifier having capacitor parallel to the feedback resistor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the capacitor in parallel to the feedback resistor taught by Fischer et al. in McGinn's amplifier to remove the unwanted signal (column 8 lines 31-37).

7. Claim 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGinn (US 5333192) in view of Koenig et al. (US 5881148).

Regarding **claims 15 & 16**, McGinn does not explicitly specify the T1 and E1 of the telephone line, however Koenig et al. teaches the T1 (E1 is the equivalent European standard). As the McGinn's circuit used in telephone line, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the circuit to the T1/E1 transmission line.

### ***Conclusion***

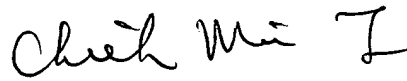
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 703-305-3416. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edith Chang  
February 3, 2004

  
**CHIEH M. FAN**  
**PRIMARY EXAMINER**